able 1. Changes to Rel B RBR Class - RTM baseline 03-14-97

R_id	req_key	Rel	req_cat egory	segme nt	req_t ype	s_ver if_me thod	s_ver if_sta t	a_ver if_me thod	a_ver if_sta t	CCR	text	interpretation text	clarification
SD0010#B	8999		mission essential	FOS | CSMS	opera tiona l ↓ interf ace | funct ional	test	un- verifi ed	test	un- verifi ed	97- 0116A	ECS shall use and support the Space Network (SN), via the EDOS/EBnet interface, to obtain the forward and return link data communications needed to achieve full end-to-end ECS functionality.	ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS	
SD0015#B	8986		mission critical	FOS | CSMS	opera tiona l ↓ interf ace | funct ional	test	un- verifi ed	test	un- verifi ed	97- 0074	ECS shall use and support the Deep Space Network (DSN), the Ground Network (GN), and the Wallops Orbital Tracking Station (WOTS), via the EDOS/EBnet interface, as backup of the SN, to obtain forward and return link data communications.	ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS	
SD0020#B	8812		mission critical	FOS | SDPS | CSMS	opera tiona l ↓ interf ace | funct ional	test	un- verifi ed	demo	un- verifi ed	96- 1468A	ECS shall use and support the EDOS/EBnet interface to obtain the data capture, data archival, and data distribution services needed to achieve full end-to-end ECS functionality.		
SD0025#B	7094		mission critical	FOS | CSMS	opera tiona l ↓ interf ace | funct ional	test	un- verifi ed	test	un- verifi ed	96- 0956A	ECS shall use EBnet for flight operations data transfers.		
SD0500#B	8818		mission critical	FOS | SDPS | CSMS	funct ional ↓ opera tiona l	test	un- verifi ed	test	un- verifi ed	96- 1468A	ECS shall perform the following major functions: a. EOS Mission Planning and Scheduling b. EOS Mission Operations c. Command and Control d. Communications and Networking e. Data Input f. Data Processing g. Data Storage h. Data Distribution i. Information Management j. End-to-End Fault Management k. System Management	This requirement covers a global perspective of ECS. Therefore, only selected software and hardware requirements are mapped to this RbR. Additional requirements are mapped to RBRs that are more specific.	
SD0545#B	9144		mission fulfillm ent	FOS | SDPS | CSMS	funct ional ↓ evolv able	analy sis	un- verifi ed	analy sis	un- verifi ed	97- 0227	ECS shall be able to accommodate growth (e.g., capacity) in all of its functions as well as the addition of new functions.		
SD0560#B	8841		mission	FOS |	funct	inspe	un-	inspe	un-	96-	ECS benchmark tests and test data sets shall be defined	As part of acceptance test	

R_id	req_key	Rel	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	CCR	text	interpretation text	clarification
			essential	SDPS | CSMS	ional ↓ procedural ↓ operational	ction	verified	ction	verified	1468A	for system verification and data quality evaluation.	procedures (411/VE1) we will define a set of bench mark tests and associated test data that will be ~~manintained~~ maintained under configuration control.	
SD0700#B	8843		mission essential	FOS | SDPS | CSMS	functional ↓ procedural ↓ operational	inspection	un-verified	inspection	un-verified	96-1468A	Each ECS element shall provide the following, to be used in the revalidation of its functional performance: a. Benchmark test(s) b. Standard test data sets.	As part of acceptance test procedures (411/VE1) we will define a set of bench mark tests and associated test data that will be maintained under configuration control.	
SD0710#B	9060		mission essential	FOS | SDPS | CSMS	functional ↓ procedural ↓ operational	inspection	un-verified	inspection	un-verified	97-0184A	Each ECS element shall provide access to the following items used in the checkout and verification process: a. Stored test data sets b. Stored test plans c. Stored test procedures.		
SD0720#B	8848		mission critical	FOS | SDPS | CSMS	functional ↓ operational	test	un-verified	test	un-verified	96-1468A	Each ECS element shall be able to validate at any time during the life-time of the ECS that the ECS element primary functional performance is consistent with pre-defined operational benchmark tests.		
SD0760#B	9000		mission critical	FOS | CSMS	functional ↓ operational	demo	un-verified	demo	un-verified	97-0116A	Each ECS element shall support end-to-end EOS system testing and fault isolation.	FULL AM-1 END-TO-END TESTING	
SD0780#B	9158		mission fulfillment	FOS | SDPS | CSMS	functional ↓ operational	demo	un-verified	demo	un-verified	97-0239	Each ECS element shall be capable of being monitored during testing.		
SD1010#B	9075		mission critical	FOS | SDPS | CSMS	performance	test	un-verified	test	un-verified	97-0194A	ECS shall support daily data volume, processing load, storage volume, instrument support, and data traffic as derivable from and specified in Appendix C and D.	FOS applicability: instrument support only. ~~The FOS/EOC requirement is met through the use of CSMS services.~~	Refer to the following requirements for Release B capacity requirements: Processing -PGS 1300#B; Archiving Capacity - DADS1805#B,

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													DADS2778#B, and DADS2900#B; and Archive Throughout - DADS2778#B and DADS3100#B.
SD1490#B	9077		mission essentia l	FOS	interf ace | proce dural | opera tiona l	inspe ction	un- verifi ed	inspe ction	un- verifi ed	97- 0194A	ECS elements shall interface with the resident EOS Project Scientist for resolution of conflicts between observations of equal priority.		The purpose of this requirement is to identify the Project Scientist as the authority for resolving these conflicts. The direction for resolution of conflicts would be communicated via email or telephone. Resolution of conflicts will be implemented using the standard FOS planning and scheduling tools.
SD1990#B	9148		mission essentia l	FOS | SDPS | CSMS	secur ity	inspe ction	un- verifi ed	inspe ction	un- verifi ed	97- 0241	The ECS system and elements shall employ security measures and techniques for all applicable security disciplines which are identified in the preceding documents. These documents shall provide the basis for the ECS security policy.	The FOS/EOC requirement is met through the use of CSMS services. For release B as determined in the technical security planning policy activity identified in EOSD2100.	
SD2510#B	9058		mission critical	FOS | SDPS | CSMS	secur ity	demo	un- verifi ed	demo	un- verifi ed	97- 0184A	ECS elements shall maintain an audit trail of: a. All accesses to the element security controlled data b. Users/processes/elements requesting access to element security controlled data c. Data access/manipulation operations performed on security controlled data d. Date and time of access to security controlled data e. Unsuccessful access attempt to the element security controlled data by unauthorized users/elements/processes f. Detected computer system viruses and worms g. Actions taken to contain or destroy a virus	The FOS/EOC requirement is met through the use of CSMS services.	
SD2550#B	7951		mission critical	FOS | SDPS | CSMS	secur ity	test	un- verifi ed	test	un- verifi ed	96- 0980B	The ECS elements shall limit use of master passwords or use of a single password for large organizations requiring access to a mix of security controlled and non-sensitive data.	The FOS/EOC requirement is met through the use of CSMS services.	
SD2660#B	7952		mission essentia l	FOS | SDPS | CSMS	secur ity ⊥ proce dural ⊥ opera tiona l	demo	un- verifi ed	demo	un- verifi ed	96- 0980B	ECS elements shall at all times maintain and comply with the security directives issued by the SMC.	The FOS/EOC requirement is met through the use of CSMS services.	
SD2710#B	7953		mission essentia l	FOS | SDPS	secur ity ⊥	demo	un- verifi	demo	un- verifi	96- 0980B	ECS elements shall report all detected computer viruses and actions taken to the	The FOS/EOC requirement is met through the use of	

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			l	| CSMS	opera tiona l		ed		ed		SMC.	~~CSMS services.~~	
SD2990#B	8917		mission critical	FOS | SDPS | CSMS	secur ity	demo	un-verifi ed	demo	un-verifi ed	96-1468A	The ECS elements shall support the recovery from a system failure due to a loss in the integrity of the ECS data or a catastrophic violation of the security system.	~~The FOS/EOC requirement is met through the use of CSMS services.~~	
SD3000#B	9162		mission critical	FOS | SDPS | CSMS	secur ity	demo	un-verifi ed	demo	un-verifi ed	97-0239	The ECS shall provide for security safeguards to cover unscheduled system shutdown (aborts) and subsequent restarts, as well as for scheduled system shutdown and operational startup.	~~The FOS/EOC requirement is met through the use of CSMS services.~~ For each site as applicable to site activation	
SD3200#B	7138		mission critical	FOS | SDPS | CSMS	secur ity⌡ opera tiona l	inspe ction	un-verifi ed	inspe ction	un-verifi ed	96-0956A	A minimum of one backup which is maintained in a separate physical location (i.e., different building) shall be maintained for ECS software and key data items (including security audit trails and logs).		
SD3220#B	8919		mission essentia l	FOS | SDPS | CSMS	~~proce dural~~ ⊦ secur ity⌡ proce dural ⌡ opera tiona l	inspe ction	un-verifi ed	inspe ction	un-verifi ed	96-1468A	All media shall be handled and stored in protected areas with environmental and accounting procedures applied.		
SD3490#B	9008		mission fulfillm ent	FOS | SDPS | CSMS	RMA ⌡ opera tiona l	demo	un-verifi ed	demo	un-verifi ed	97-0116A	Reliability statistics for ECS shall be collected and monitored using the Mean Time Between Maintenance (MTBM) for each component and operational capability.	~~The FOS/EOC requirement is met through the use of CSMS services.~~	